

ABSTRACT OF THE DISCLOSURE

An improved battery cell current collectors which are formed as a unitary structure with mating electrodes attached on one surface. The current collectors are formed of non-metallic material including particle-dispersed plastic tape, plastic dispersed carbon tape, fiber dispersed conductive plastic and carbon tape, or particle and metallic powder dispersed conductive tape to resist corrosion. The need to charge the battery immediately after manufacture is eliminated by the improved battery cell design. Additional utility is provided by fire retardant being mixed with one or both of the electrode composite forming the current collectors and the layer forming the current collectors and by the biasing of the current collectors against their terminating contacts by the compressed current collector material communicating a bias of the current collectors against the internal surface of the battery container thereby increasing current flow and decreasing corrosion.